Molecular Partners Highlights Upcoming Oncology Portfolio Presentations in December

December 9, 2021

- *Program overview and study design for MP0317 to be presented at ESMO Immuno-Oncology*
- *Preclinical data supporting novel mechanism of AML candidate MP0533 to be presented at ASH*
- *Oncology R&D Day to review cancer therapeutic portfolio and strategy on December 15, 2021*

ZURICH-SCHLIEREN, Switzerland and CONCORD, Mass., Dec. 09, 2021 (GLOBE NEWSWIRE) -- Molecular Partners AG (SIX: MOLN; NASDAQ: MOLN), a clinical-stage biotech company developing a new class of custom-built protein drugs known as DARPin therapeutics, today announced a series of events in December 2021 that will highlight various aspects of its DARPin cancer therapeutic portfolio. These events include a presentation at the European Society of Medical Oncology Immuno-Oncology (ESMO-IO) Congress, focused on the clinical-stage fibroblast activation protein (FAP)-targeted CD40 activator candidate, MP0317; a presentation at the American Society of Hematology (ASH) Annual Meeting, focused on MP0533, the company's acute myeloid leukemia (AML) candidate, designed to simultaneously engage CD3 on T cells and target three tumor associated antigens (TAAs); and a comprehensive review of the company's cancer portfolio and its research & development strategy at a virtual Oncology Day to be held at 8:30 am ET on December 15, 2021.

"Our growing understanding of cancer biology enables us to expand and enhance our oncology portfolio. We carefully analyze clinical results of antibodies, their targets, and the underlying biology, with a focus on near misses. We then apply our DARPin technology to overcome these problems to offer solutions to patients in need," said Patrick Amstutz, Ph.D., CEO of Molecular Partners. "Data shared this month will show how our current cancer therapeutic portfolio addresses difficult targets and modes of action. At our Oncology Day, we will discuss further extensions of our platform in cancer as part of our corporate strategy to build out our offering in areas where the unique DARPin protein drug class can make a meaningful impact for patients."

Details of the events follow:

ESMO Immuno-Oncology (onsite and online congress), Geneva, Switzerland; December 8-11, 2021
At ESMO-IO, Molecular Partners will focus on MP0317, which targets both fibroblast activation protein (FAP) and the immunostimulatory protein CD40 to enable tumor-localized immune activation in solid tumors. Through this mechanism, MP0317 is designed to activate immune cells specifically within the tumor microenvironment, potentially delivering greater efficacy with fewer side effects compared to other CD40-targeting agents. MP0317 is the second DARPin immuno-oncology therapeutic candidate to enter clinical trials. Its Phase 1 first-in-human clinical study design includes collection of a wide array of biomarkers to support the establishment of combination therapies in specific indications.

- A poster reviewing the MP0317 Phase 1 study will be on display throughout the conference.
- A presentation on MP0317 will be presented on December 10:
  Title: The development of MP0317 FAP X CD40 agonist DARPin
  Educational Session: Emerging Immunotherapy platforms: From bispecifics to cell transfer therapy
  Date: Friday, December 10
  Time: 5:00-6:30 pm ET
  Location: Virtual / Hall C

63rd ASH Annual Meeting & Exposition, Atlanta, Georgia, U.S.; December 11-14, 2021
At ASH, Molecular Partners will focus on MP0533, its DARPin candidate for acute myeloid leukemia (AML). MP0533 is designed to target AML cells, especially leukemic stem cells (LSCs), via the three tumor-associated antigens CD33, CD70 and CD123, and bind CD3 on T cells to induce tumor cell killing. MP0533 preferentially targets AML cells via an avidity dependent mechanism which increases the candidate's total binding strength when two or more antigens are bound. This leads to T-cell mediated killing of these malignant cells upon CD3 engagement, while healthy cells, which express only one of these targets or none, are left unharmed.

In previously reported preclinical work, Molecular Partner's AML program has demonstrated the potential to improve upon the therapeutic window of CD3-activated T cell engagers through reducing dose-limiting toxicity via its unique avidity-driven targeting mechanism. The research at ASH will review prior work from the program and share new *ex vivo* and *in vivo* studies supporting MP0533's anti-tumor activity and enhanced therapeutic window, relative to another CD3-activating molecule. More specifically, we will show that MP0533 is able to induce the killing of AML patients' malignant cells by the patients' own T cells, demonstrating that AML patients could respond to MP0533 despite a potentially weaker T cell response. We will further demonstrate that such an efficacy may be achieved without impacting the safety profile of MP0533, as demonstrated by specific killing of LSCs while preserving healthy hematopoietic stem cells. Clinical development of MP0533 is expected to initiate in 2022.

A poster reviewing the preclinical development of MP0533 will be displayed on December 11 accompanied by an oral presentation.
Title: Avidity-Engineered CD3 Engaging DARPin Targeting Three Tumor Associated Antigens Induce Strong and Specific T Cell Dependent Killing of AML Cells with Potential for Improved Safety
Session: 604. Molecular Pharmacology and Drug Resistance: Myeloid Neoplasms: Poster I
Date: Saturday, December 11, 2021
Time: 5:30 PM - 7:30 PM ET
Location: Virtual / Georgia World Congress Center, Hall B5

Molecular Partners Virtual Oncology Day (online only), 8:30 am ET, December 15. Register here.
Molecular Partners will host a virtual session with its management team focused on cancer portfolio and strategy, including MP0310, MP0317, MP0533 and additional research programs. After a brief corporate review, the session will explore the underlying biology, candidate design and preclinical data supporting each oncology or immuno-oncology program, as well as the underlying development strategy and new opportunities for the portfolio. Molecular Partners management will be joined by leading AML experts Professors Ochsenbein and Riether from the University of Bern.

Relevant materials from the above events will be shared via Molecular Partners' website investor portal at investors.molecularpartners.com.

About Molecular Partners AG
Molecular Partners AG is a clinical-stage biotech company developing DARPin therapeutics, a new class of custom-built protein drugs designed to address challenges current modalities cannot. The Company has formed partnerships with leading pharmaceutical companies to advance DARPin therapeutics in the areas of ophthalmology, oncology and infectious disease, and has compounds in various stages of clinical and preclinical development across multiple therapeutic areas. www.molecularpartners.com; Find us on Twitter - @MolecularPrtnrs

Cautionary Note Regarding Forward-Looking Statements
Any statements contained in this press release that do not describe historical facts may constitute forward-looking statements as that term is defined in the Private Securities Litigation Reform Act of 1995, as amended, including, without limitation, implied and express statements regarding the clinical development of Molecular Partners' current or future product candidates, including expectations regarding timing of clinical trials or the potential therapeutic and clinical benefits of Molecular Partners' product candidates. These statements may be identified by words such as "believe", "expect", "may", "plan", "potential", "will", "would" and similar expressions, and are based on Molecular Partners AG's current beliefs and expectations. These statements involve risks and uncertainties that could cause actual results to differ materially from those reflected in such statements. Some of the key factors that could cause actual results to differ from our expectations include our plans and development of any new indications for our product candidates; our commercialization, marketing and manufacturing capabilities and strategy; our ability to identify and in-license additional product candidates; our plans to develop and potentially commercialize our product candidates; our ongoing and planned clinical trials and preclinical studies for our product candidates; the timing of and our ability to obtain and maintain regulatory approvals for our product candidates; the extent of clinical trials potentially required for our product candidates; the clinical utility and ability to achieve market acceptance of our product candidates; our intellectual property position; our reliance on third party partners and collaborators over which we may not always have full control; and other risks and uncertainties that are described in the Risk Factors section of Molecular Partners' Registration Statement on Form F-1 filed with Securities and Exchange Commission (SEC) on June 14, 2021 and other filings Molecular Partners makes with the SEC. These documents are available on the Investors page of Molecular Partners' website at http://www.molecularpartners.com. Any forward-looking statements speak only as of the date of this press release and are based on information available to Molecular Partners as of the date of this release, and Molecular Partners assumes no obligation to, and does not intend to, update any forward-looking statements, whether as a result of new information, future events or otherwise.

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